

The new cultivar of 'CW2A' was asexually reproduced via stem cuttings from vegetative and/or flowering plants, and cloning by the inventor at the inventor's greenhouses, nurseries, fields and/or facilities in Colorado Springs, Colo. and Wray, Colo. Asexual clones from the original source have been tested in greenhouses, nurseries, and/or fields. The properties of each clone from this cultivar were found to be transmissible by such asexual reproduction. The cultivar is stable and reproduces true to type in successive generations of asexual reproduction (i.e., clones from 'CW2A' are uniform).

BRIEF SUMMARY OF THE INVENTION

This invention relates to a new and distinctive hemp cultivar designated as 'CW2A'.

As used herein, the term "cultivar" is used interchangeably with "variety", "strain", and/or "clone".

The inventor reproduced progenies asexually by stem cutting from vegetative and/or flowering plants, and cloning. The plant has been and continues to be asexually reproduced by stem cutting from vegetative and/or flowering plants, and cloning at the inventor's greenhouses, nurseries, fields and/or facilities in Colorado Springs, Colo. and Wray, Colo.

DESCRIPTION OF THE DRAWINGS

The accompanying color photographs depict characteristics of the new 'CW2A' plants as nearly true as possible to make color reproductions. The overall appearance of the 'CW2A' plants in the photographs is shown in colors that may differ slightly from the color values described in the detailed botanical description.

FIG. 1 shows an overall view of the 'CW2A' indoor plant at the early to mid vegetative growth stage with lateral branches and further intermodal growth as shown from above.

FIG. 2 shows an overall view of the 'CW2A' indoor plant during the mid to late vegetative growth stage as shown from the side.

FIG. 3 shows an overall view of the 'CW2A' indoor plant during the mid to late vegetative growth stage as shown from the side.

FIG. 4 shows an overall view of the 'CW2A' indoor plant at the early to mid flowering stage as shown from the side.

FIG. 5 shows a close view of flowers of the 'CW2A' indoor plant at the early to mid flowering stage.

FIG. 6 shows another close view of flowers of the 'CW2A' indoor plant at the early to mid flowering stage.

FIG. 7 shows an overall view of the 'CW2A' outdoor plant at the mid vegetative growth stage as grown in the field.

FIG. 8 shows a close view of flowers of the 'CW2A' outdoor plant at the early to mid flowering stage as grown in the field.

FIG. 9 shows an overall view of upper part (including flowers) of the 'CW2A' outdoor plant at the early to mid flowering stage as grown in the field.

FIG. 10 shows an overall view of the 'CW2A' outdoor plant at the harvest maturity as grown in the field.

FIG. 11 shows an overall view of upper part (including flowers) of the 'CW2A' outdoor plant at the harvest maturity as grown in the field.

FIG. 12 shows a close view of flowers of the 'CW2A' outdoor plant at the harvest maturity as grown in the field.

FIG. 13 shows another close view of flowers of the 'CW2A' outdoor plant at the harvest maturity as grown in the field.

DETAILED BOTANICAL DESCRIPTION

'CW2A' has not been observed under all possible environmental conditions, and the phenotype may vary significantly with variations in environment. The following observations, measurements, and comparisons describe this plant as grown at Wray, Colo., when grown in the greenhouse, nursery or field, unless otherwise noted.

Plants for the botanical measurements in the present application are annual plants. In the following description, the color determination is in accordance with The Royal Horticultural Society Colour Chart, Sixth Edition (2015), except where general color terms of ordinary dictionary significance are used.

'CW2A' is a fertile hybrid derived from a controlled-cross between proprietary cultivar '1AC' as the female parent (i.e., pollen acceptor) and another hemp plant as the male parent (i.e., pollen donor) originating from a feral hemp (a.k.a. ditch weed) population in Colorado with an unknown cannabinoid content ("Feral Male Parent").

Breeding History of the Female Parent. The lineage of proprietary female parent '1AC' comprises four generational crossings. The first crossing was made between a parental female from a cutting of *Cannabis sativa* L. originating in Colorado of unknown parentage ("First Female F₀-") with a parental male plant ("First Male F₀") which originated from a feral hemp population in Colorado with an unknown cannabinoid content. Of the resulting progeny, 40 seeds were germinated and developed into 24 female ("F₁ Females") and 16 male ("F₁ Males") plants.

For the second crossing, an egg donor from a female clone of *Cannabis sativa* L. with unknown genealogy ("Second Female") was crossed to a healthy vigorous F₁ Male from the first cross. Of the resulting offspring, twenty seeds were germinated of which 70% were female ("F₂ Females") and 30% were male ("F₂ Males").

For the third crossing, a single F₂ Female was chosen and crossed with a sibling of First Male F₀. Of the resulting progeny, fifty seeds were germinated. Twenty-five seedlings were female ("F₃ Females") and 25 were male ("F₃ Males").

The fourth generation was produced by crossing two F₃ Females that displayed the most vigor and health. Both F₃ Females chosen for the cross were short and squat in stature, had medium to broad leaf structure with tight internodes of about 1/2 inch, and displayed a 70-75 day flowering maturity after flowering initiated. The F₃ Female was chosen as the egg donor ("F₃-e") for the fourth generation. The F₃ female was also chosen as the pollen donor ("F₃-p") for the fourth generation. The F₃-p female was induced to produce male flowers, thus generating pollen, using heat and erratic photoperiod stress techniques. F₃-e was pollinated by F₃-p and generated progeny (F₄) that were all female with slightly different characteristics. All F₄ plants exhibited *indica*-dominant traits such as medium to broad leaf structure, short squat overall growth habit, and tight internodes with full flower maturity taking roughly 65-70 days after flowering initiated. About 90% of all F₄ plants exhibited resistance to pests and diseases and showed great health and vigor throughout the entire lifecycle. Few plants displayed white and/or yellow coloration similar to marbling on the leaves.